# KYOCERA D-601

THREE MOTOR DIRECT DRIVE CASSETTE DECK.





MASTERING THE ART OF SOUND

# WHERE GREAT SOUND A TOGETHER IN ONE OUTS

At Kyocera, with the D-601, we were determined to come in with a set of performance specifications that would be outstanding.

In addition, we also set about to improve those characteristics which may not be reflected in actual spec values. Let's call them *dynamic characteristics*.

They may not show in the specs, but they certainly show in the sound. Warm golden, breathtaking sound that puts you right in the middle of the music.

Listen to the D-601-it was made for critical musical ears.

## It takes care of the two basic factors for good performance.

The basic factors for top-notch cassette deck performance hinge primarily around tape transport and noise reduction systems. A flawed tape transport system prevents the most sophisticated circuitry from delivering peak performance.

Noise, on the other hand, has always set a limitation on cassette performance, due to the slow speeds used. Until the development of Dolby\* noise reduction circuitry and its incorporation into cassette decks, there was no truly satisfactory deck performance.

# The tape movement factor.

A key factor in successful tape deck performance is to move the tape across the heads at as nearly a constant speed as possible. Variations in speed, of course, come out in your speakers or headphones as wow and flutter.

Many decks claim a wow and flutter figure of 0.05% WRMS—trouble is, speed variations of 0.05% are clearly audible with piano music (one of the most revealing tests you can give a cassette deck).

The D-601 by Kyocera comes through with an exceptional wow and flutter figure of 0.035% WRMS!

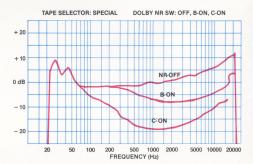
The capstan is driven by a brushless FG high torque servo motor, while a second beltless, slip-clutchless DC motor is utilized for driving the feed and take-up reels. A third motor uniquely positions the R/P head against the tape surface in record and play modes. This smooth R/P head-positioning method assures long lasting head azimuth alignment over more conventional head positioning mechanisms.

# The noise reduction factor—with Dolby B & C.

The D-601's noise reduction systems give the audiophile a convenient option for recording cassettes tailored to individual taste and type of program material. It has *two*–Dolby B & C. Basically, the Dolby B system (recommended for music material of limited dynamic range) reaches greatest

effectiveness above 4 kHz, reducing noise by about 10 dB. Dolby C (recommended for music material of very wide dynamic range) reaches effectiveness from 1 kHz and above and provides up to 20 dB of NR.

#### S/N RATIO IMPROVEMENT WITH DOLBY NR



### The APMR feature.

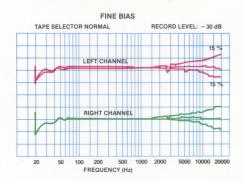
Automatic Program Mute Recording is a system built into the D-601 to provide 5-second unrecorded gaps between the recorded portions in the tape when in record mode. These gaps are useful for locating the beginning or the end of the recorded segments.

Automatic memory functions are included for memory stop, auto stop, auto play and auto repeat. Other functions included are shut-off at end of playback, record, fast forward and rewind modes.

# CERA D-601: ND GREAT SPECS COME TANDING CASSETTE DECK.

## A multi-tape capability.

Provision is made for every type of cassette tape, including metal, with complementary bias and equalization selector switches. Additionally, a fine bias adjustment is provided for optimum performance from the selected tape brand.



Illumination of the tape compartment and a see-through window enable you to monitor tape running. The tape compartment door is oil-damped for smooth operation and reduced mechanism jarring and vibration.

# Multiple features for outstanding performance.

Exceptional performance is assured by Kyocera's use of a Sendust alloy record/playback head. This meets the demands for quality performance with metal tape.

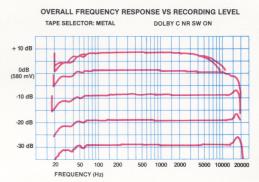
All switching is done by feather-touch pushbuttons. Separate slide controls are provided for record volume, audio output and for fine bias adjustment. The MPX filter improves quality of FM off-air recordings. Function modes are indicated by LED displays, including L/R channel

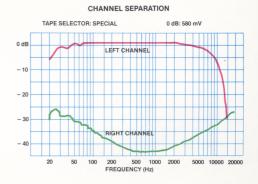


peak level. Other features are a tape counter and private listening front panel headphone jack.

Once you hear the D-601 you'll know that all the exceptional engineering Kyocera put into it was more than worth the effort. With a capable frequency response of 20-22,000 Hz. A-weighted S/N ratio of 68 dB with Dolby B and 78 dB using Dolby C. Wow and flutter is superb at 0.035% WRMS with a speed accuracy of  $\pm 0.5\%$  and a channel separation of 40 dB.

\*Dolby is a registered trademark of Dolby Laboratories, Inc.





# The complete specification story.

#### Front panel features

Tape transport: REWind, STOP, Fast Forward, PLAY, PAUSE, RECord, APMR-all feathertouch pushbuttons.

Separate recording slide level controls.

Slide output control.

Tape type selector switch-normal, CrO<sub>2</sub>,

metal-pushswitch.

Fine bias adjustment slide control.

Pushswitches: LINE/MIC, Memory-Off-Stop-Replay, Auto-repeat, Dolby\* NR-on/off, Dolby NR-B/C, MPX Fil-on/off, Poweron/off.

3-digit mechanical tape counter.

Eject button.

Headphone jack (6 m/m dia.).

Microphone jacks (6 m/m dia.) for left and right channels.

Separate LED Peak level display for left and right channels.

LED indicator for Dolby NR-B-on. LED indicator for Dolby NR-C-on.

Tape transport indicators for PLAY, PAUSE, REC.

Illuminated tape compartment.

### Rear panel

AC power cord and plug. Line input and output jacks (pin type). AC convenience outlet (unswitched).

### Electrical specifications

1. Recording system

AC bias type

Erasure system

: 105 kHz. : AC.

: Record/playback 3. Heads (Sendust).

: Erasure.

4. Overall frequency response  $\pm 3$  dB

Metal : 20 Hz to 22 kHz CrO<sub>2</sub> : 20 Hz to 20 kHz Normal : 20 Hz to 19 kHz

Signal-to-noise ratio DIN 45500, 70 µsec. Tape EQ.

(weighted-A) Dolby NR-B-effect (CCIR weighted) Dolby NR-C-effect (CCIR weighted)

: 20 dB.

: 58 dB.

: 10 dB.

: 1.5%.

: 40 dB.

Sensitivity MIC LINE

: 0.5 mV/10 kOhm. : 70 mV/50 kOhm.

7. Output

LINE (O VU, Dolby : 580 mV. NR) Headphones : 40 mV.

8. Harmonic distortion (at 1 kHz O VU level)

9. Channel separation (at 1 kHz)

Erasure–(Band pass filter at 1 kHz) : 70 dB. 11. Fine bias adjustable

range 12. APMR time

 $\pm 15\%$ . : 5 sec.

(approximate).

### Mechanism specifications

Capstan drive Reel drive

: Brushless FG servo. : DC motor governor-

Head assist

: DC motor governor-

less.

2. Wow/flutter (MTT-111)

: 0.035%.

3. Speed tolerance (MTT-111)

 $: \pm 0.5\%.$ 

4. Rewind/FF time required for C-60

: 70 sec.

#### General specifications

Power requirement Power consumption : AC 120 V 60 Hz.

: 38 Watts.

Dimensions

Width 460 mm (181/8"). Height : 100 mm (4"). Depth 308 mm (121/8"). : 16.0 lbs. (7.2 kgs). Net weight

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